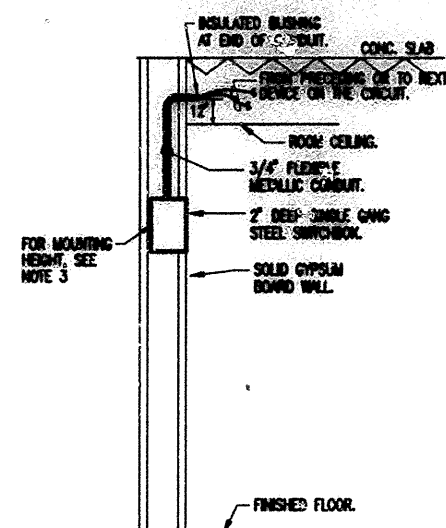
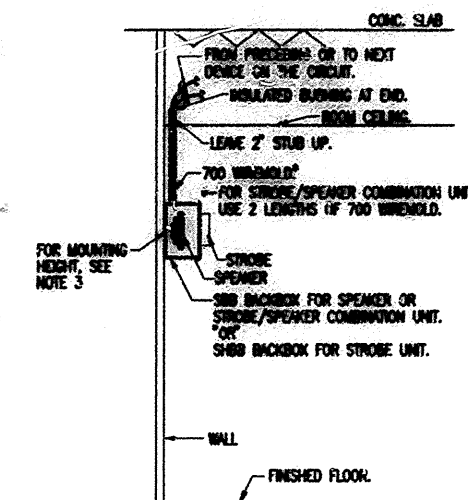


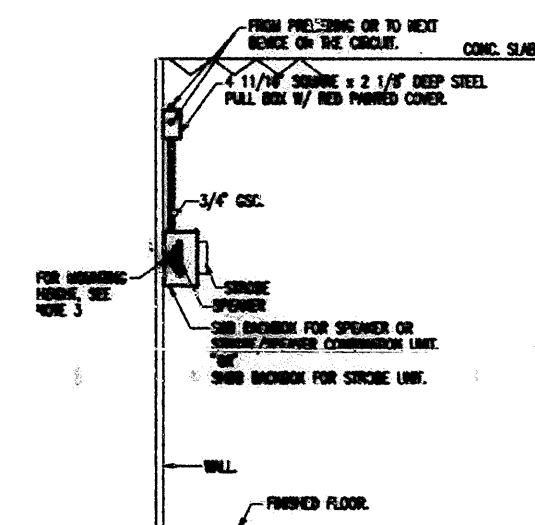
**TYPICAL RECESSED SPEAKER INSTALLATION
DETAIL "A"**
N.T.S.



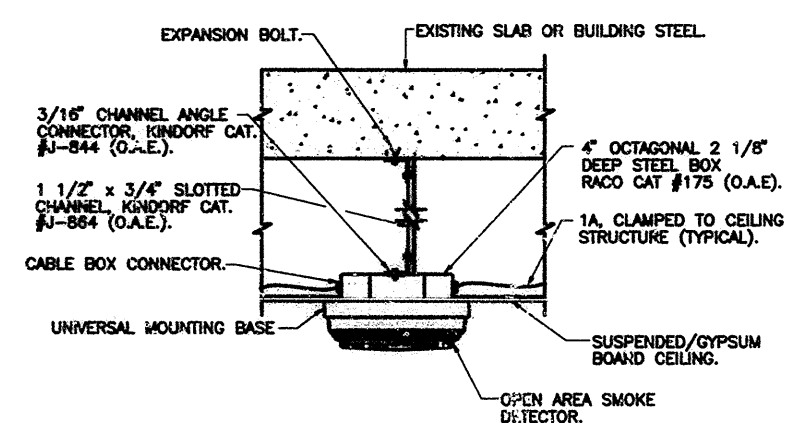
**TYPICAL FLUSH MOUNTED
STROBE INSTALLATION DETAIL "B"**
N.T.S.



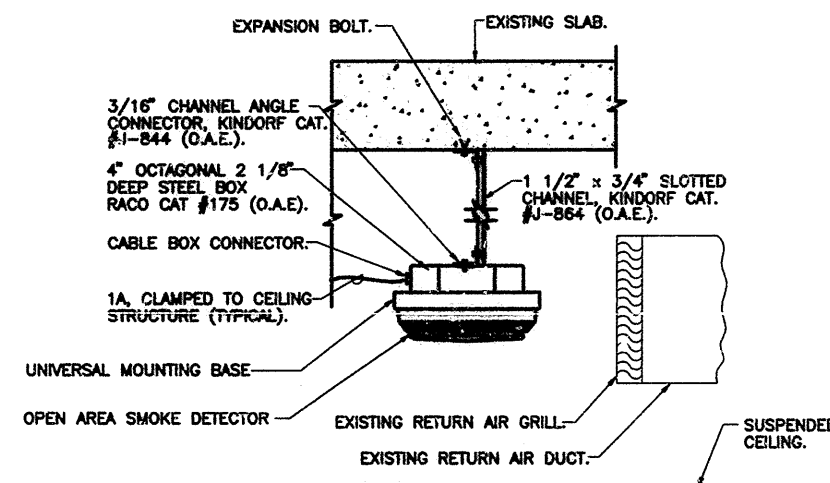
**TYPICAL SURFACE MOUNTED
STROBE, SPEAKER OR COMBINATION
INSTALLATION DETAIL "C"**
N.T.S.



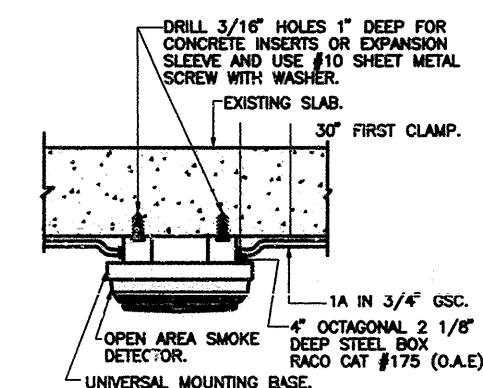
**TYPICAL SURFACE MOUNTED
STROBE, SPEAKER OR COMBINATION
INSTALLATION DETAIL "D"**
N.T.S.



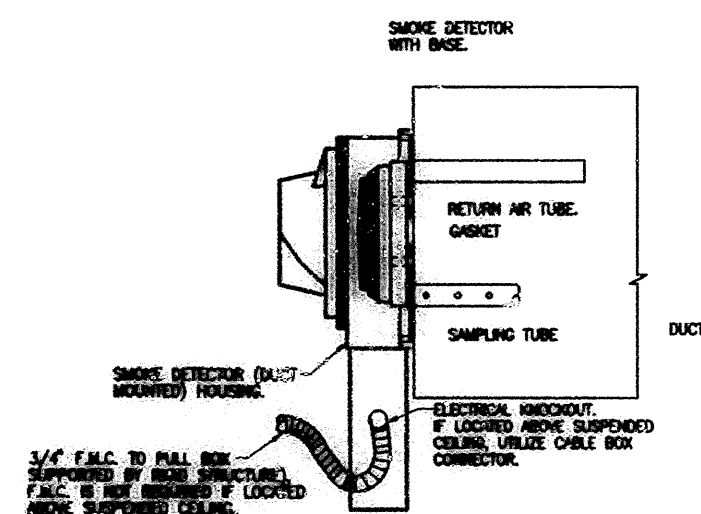
**SMOKE DETECTOR INSTALLATION DETAIL "E"
(FOR SUSPENDED CEILING)**
N.T.S.



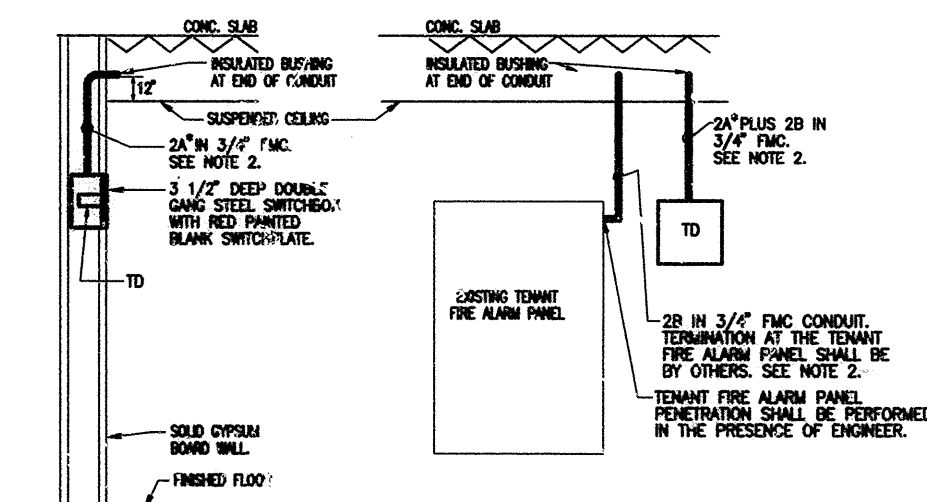
**SMOKE DETECTOR INSTALLATION DETAIL "F"
(IN FRONT OF RETURN AIR GRILL)**
N.T.S.



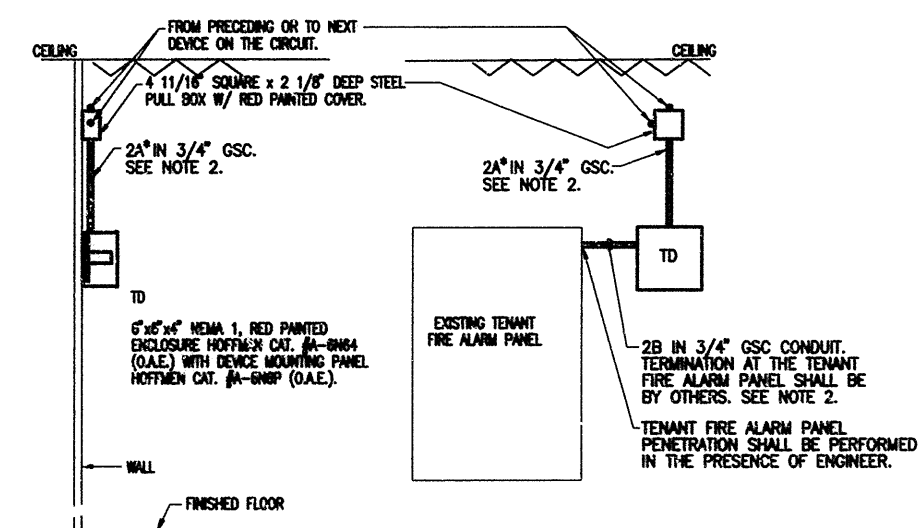
**SMOKE DETECTOR INSTALLATION DETAIL "G"
(FOR OPEN CEILING)**
N.T.S.



**SMOKE DETECTOR INSTALLATION DETAIL "H"
(DUCT MOUNTED IN HALLWAY W/ SAMPLING TUBE)**
N.T.S.



**TYPICAL FLUSH MOUNTED TD INSTALLATION DETAIL "I"
(NEAR EXISTING FLUSH MOUNTED TENANT F.A. PANEL)**
N.T.S.



**TYPICAL SURFACE MOUNTED TD INSTALLATION DETAIL "J"
(NEAR EXISTING SURFACE MOUNTED TENANT F.A. PANEL)**
N.T.S.

NOTES:

1. FOR ABBREVIATIONS, TERMINATION & CIRCUIT LEGEND, GENERAL NOTES AND LEGEND/ SPECIFICATION, SEE DWG E-1.
2. FOR WIRING DIAGRAMS, SEE DWG E-3.
3. CONTRACTOR SHALL INSTALL THE FIRE ALARM DEVICE AT 80" ABOVE FINISHED FLOOR OR 6" BELOW ROOM CEILING, WHICHEVER IS LOWER.
4. RETURN AIR SMOKE DETECTORS SHALL BE MOUNTED 6" IN FRONT OF THE RETURN AIR GRILL.
5. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR DETECTOR BASE WIRE PENETRATION IN ORDER TO PREVENT "DRAFTING" THROUGH BASE.

Sheet 4 of 75

DESIGNED BY
CHECKED BY

DESIGNED BY
CHECKED BY
ELECTRICAL ENGINEER

No. Date Revision Approved

ENGINEERING DEPARTMENT
DESIGN DIVISION

WORLD
TRADE
CENTER

ELECTRICAL

Title
FIRE ALARM SYSTEM
DEVICE UPGRADE
PHASE III
1 WORLD TRADE CENTER
CONTRACT NO. 3

**SPEAKER, STROBE
& SMOKE DETECTOR
MOUNTING DETAILS
& WIRING DIAGRAM**

This drawing subject to conditions in Contract. All inventions, ideas, designs and methods herein are reserved to Port Authority and may not be used without its written consent.

S.FELDMAN R.DUKESMIRE A.S.
Designed by Drawn by Checked by

AUGUST 9, 1999
Date

WTC-881.178
Contract Number

E-2
Drawing Number